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GARY VESPERMAN: My name is Gary Vesperman, V-e-s-p-e-r-m-a-n. I live in Henderson, Nevada. And I used to follow nuclear power quite a bit back in the early '70s when I lived in Silicon Valley working for the computer industry.

1 The typical introduction to the document about Yucca Mountain refers to a projection of storing 70,000 or so metric tons of high-level radioactive waste. I think that the DOE would be more honest and forthcoming if it would expand that projection to include some discussion of how much radioactivity that we are really talking about here.

I'd like to suggest three measures of radioactivity. The first one is how much radioactivity in terms of radioactivity that Yucca Mountain would be storing.

The second measure is the atomic bomb that was dropped on Hiroshima back in World War II killed approximately 300,000 people, and to this day people are still dying premature deaths from that bomb.

A typical nuclear power plant generates around a thousand megawatts of electricity. I understand that the rule of thumb is when a 1,000 megawatt nuclear power plant operates at full power for one year, it accumulates the radioactivity equivalent of 2,300 Hiroshima bombs of radioactivity.

If you do a little multiplying here, the projected lifetime of a typical plant is around 40 years, although there's been quite a few closing a lot sooner than 40 years, if we multiply 40 years times say maybe 50 nuclear power plant we are looking at 2000, 40 times 50, 2000 years times 2,300 Hiroshima bombs. We are looking at oh, around five million bombs of radioactivity. For some reason that doesn't fit what I remember my old calculation of several years ago of 50 million, but it's quite a few. Anyway, that's the second measure of radioactivity.

The third measure is Chernobyl. The Chernobyl plant, the explosion back in '86, I remember reading that it cost the Soviet Union and Europe around $300 billion worth of damage. That's one medium sized nuclear power plant. So a third measure of radioactivity is what would be the equivalent of how many Chernobyls of radioactivity if something happens with the dump up at Yucca Mountain.

A couple days ago I was talking on the phone with a rather knowledgeable scientist that many of you people know, Grant Hudlow. He came back from the Bay Area. He was telling me that he was astounded to learn that after the waste fuel is reprocessed the radioactivity is far more than the radioactivity of the fuel before it is reprocessed. So possibly a fourth measure of radioactivity is to take into account radioactivity that is produced after the fuel is reprocessed.

Thank you for the opportunity.